U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT

St. Joseph Hospital Phosphine Release - Removal Polrep



EPA Region 5 Records Ctr.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region V

Subject:

POLREP#1

Initial Pollution Report

St. Joseph Hospital Phosphine Release

Ypsilanti, MI

Latitude: 42.2647020 Longitude: -83.6568760

To:

Bruce VanOtteren, MDEQ Mike Chezik, U.S. DOI David Chung, U.S. EPA Jason El-Zein, U.S. EPA Linda Nachowicz, U.S. EPA Jeff Kelley, U.S. EPA Region 5 Mark Durno, U.S. EPA Region V

Duty Office, USCG Joe Walczak, MDEQ Joe Malek, U.S. EPA

From:

Lori Muller, On-Scene Coordinator

Date:

4/26/2011

Reporting Period: 4/25/2011 to 4/26/2011

1. Introduction

1.1 Background

Site Number: Contract Number:

D.O. Number: Action Memo Date:

Response Authority: CERCLA Response Type: Emergency
Response Lead: EPA Incident Category: Removal Action

NPL Status: Non NPL Operable Unit:

Mobilization Date: 4/25/2011 **Start Date:** 4/25/2011

Demob Date: Completion Date:

CERCLIS ID: RCRIS ID:

ERNS No.: State Notification:

FPN#: Reimbursable Account #:

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

At approximately 1000 hours, on April 25, 2011, a private citizen attempted suicide by ingesting "poison peanuts" that contained zinc phosphide. The chemical reaction between the zinc phosphide and the individual's body resulted in the release of phosphine gas.

The individual was transported to St. Joseph Mercy Hospital, in Ypsilanti, Michigan, and was placed in a room in the hospital's Intensive Care unit. Due to the individual giving off phosphine gas, the doctors and nurses at the hospital were initially exposed to the gas, and, as a result, showed signs of exposure (e.g., difficulty breathing, nausea, etc.).

The hospital staff moved the individual to a second room in the hospital's Intensive Care unit which was placed under negative pressure. This action minimized the exposure to hospital personnel beyond those doctors and nurses who were directly caring for the individual.

Mr. Pierre Gonyon, St. Joseph's contact for facility safety, contacted the hospital's cleanup contractor, Arch Environmental Group, Inc. (Arch Environmental), of Farmington Hills, Michigan, and the Washtenaw County Hazardous Materials Response Authority (WCHMRA).

The workers from Arch Environmental worked to decontaminate surfaces and containerize the equipment and other materials in the first Intensive Care unit that came into direct contact with the individual.

WCHMRA used a Dräger Chip-Measurement System gas monitor to measure the

concentration of phosphine gas in the breathing zone of the patients room. These measurements indicated a concentration of phosphine gas between 0.1 and 0.3 ppm.

After depleting its inventory of phosphine chips, WCHMRA contacted the U.S. EPA, at 1627 hours, in order to obtain additional technical assistance and air monitoring equipment capable of monitoring for phosphine gas.

Between approximately 2030 and 2130 hours, on April 25, 2011, U.S. EPA and START arrived at the hospital with a RAE Systems ToxiRAE II gas monitor capable of monitoring phosphine gas down to a level of 0.01 ppm.

After leaving the ToxiRAE in the care of the Arch Environmental personnel, U.S. EPA and START left the hospital at approximately 2230.

1.1.2.1 Location

St Joseph Hospital 5301 McAuley Dr. Ypsilanti, MI 48197

1.1.2.2 Description of Threat

See section 1.1.2.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

N/A

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

A summary of the initial response activities and planned activities for the night of April 25, 2011, are as follows:

- Initial air monitoring of the first Intensive Care room with a Dräger Chip-Measurement System gas monitor.
- Initial and continued decontamination of the first Intensive Care room where the hospital first placed the individual.
- Additional air monitoring of the first Intensive Care room, during decontamination, with the RAE Systems ToxiRAE II gas monitor
- Completion of the decontamination of the first Intensive Care room
- Continued air monitoring of the second Intensive Care room with the RAE Systems ToxiRAE II gas monitor.
- Decontamination of the second Intensive Care room□□

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2.1.2 Response Actions to Date
See section 2.1.1.
2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)
N/A
2.1.4 Progress Metrics
N/A
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Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

2.2 Planning Section

N/A

- 2.2.1 Anticipated Activities
- 2.2.1.1 Planned Response Activities
- **2.2.1.2 Next Steps**
- **2.2.2 Issues**
- 2.3 Logistics Section

N/A

- 2.4 Finance Section
 - 2.4.1 Narrative

N/A

2.5 Safety Officer

2.6 Liaison Officer

N/A

2.7 Information Officer

N/A

2.7.1 Public Information Officer

2.7.2 Community Involvement Coordinator

3. Participating Entities

3.1 Unified Command

N/A

3.2 Cooperating and Assisting Agencies

U S Environmental Protection Agency
U S EPA Technical Contractor (Dynamac Corporation)
Washtenaw County Hazardous Materials Response Authority
Arch Environmental Group, Inc.
St. Joseph Mercy Hospital
Agency for Toxic Substances and Disease Registry

4. Personnel On Site

U.S. Environmental Protection Agency FOSC Lori Muller Washtenaw County Hazardous Materials Response Authority: Victor Chevrette Arch Environmental Group, LLC. Michael Daul U.S. EPA Technical Contractor (Dynamac Corporation): Michael Browning St. Joseph Mercy Hospital: Pierre Gonyon

5. Definition of Terms

N/A

6. Additional sources of information

6.1 Internet location of additional information/reports

N/A

6.2 Reporting Schedule

N/A

7. Situational Reference Materials

N/A